

## 3.2 HW p136-137 14-25, 32-36, 39

14.  $m\angle 3 = 75$

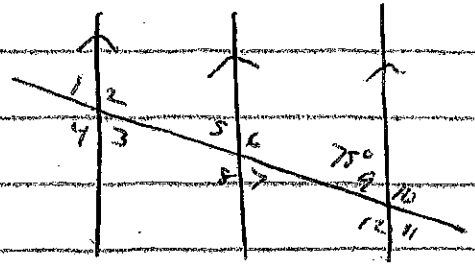
15.  $m\angle 5 = 75$

16.  $m\angle 6 = 105$

17.  $m\angle 8 = 105$

18.  $m\angle 11 = 75$

19.  $m\angle 12 = 105$



20.  $m\angle 2 = 137$

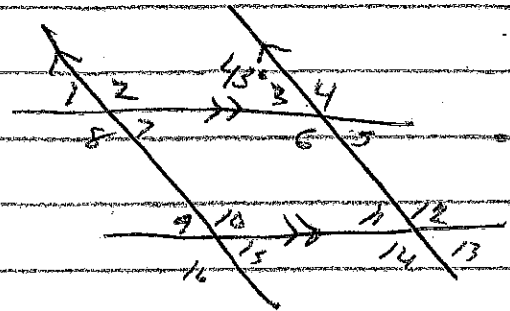
21.  $m\angle 7 = 43$

22.  $m\angle 10 = 137$

23.  $m\angle 11 = 43$

24.  $m\angle 13 = 43$

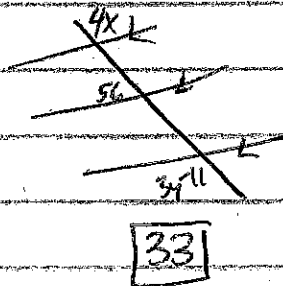
25.  $m\angle 16 = 137$



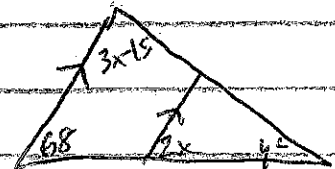
32.  $4x + 56 = 180$

$4x = 124$

$x = 31$



33



$3y - 11 + 56 = 180$

$3y + 45 = 180$

$3y = 135$

$y = 45$

$2x = 68$

$x = 34$

$3(34) - 15$

$102 - 15$

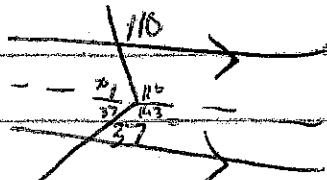
$87$

$87 + 68 + y^2 = 180$

$y^2 = 25$

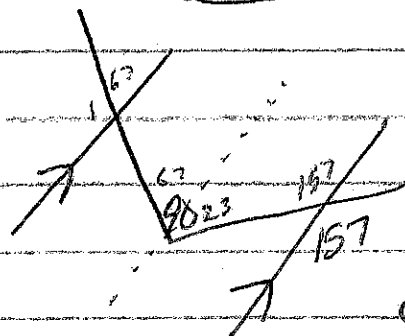
$y = \pm 5$

34.



$70 + 37 = 107 = m\angle 1$

35

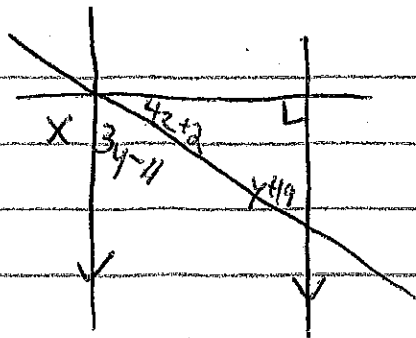


$$\begin{array}{r} 180 \\ - 90 \\ \hline 90 \\ - 23 \\ \hline 67 \end{array}$$

$180 - 67$

$m\angle 1 = 113$

36.  $(X=90)$  (corr)



$$3y-11 = y+19 \text{ (alt int)}$$

$$2y = 30$$

$$(y=15)$$

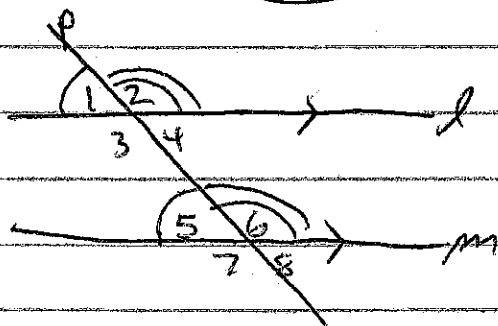
$$15+19$$

$$34 + 90 + 4z + 2 = 180$$

$$4z + 2 = 56$$

$$(z=13.5)$$

39.



G:  $l \parallel m$

P:  $\angle 1 \cong \angle 8$

$\angle 2 \cong \angle 7$

Statements

Reasons

①  $l \parallel m$

① Given

②  $\angle 1 \cong \angle 5$ ;  $\angle 2 \cong \angle 6$

② If  $\parallel$ , corr  $\angle$ s  $\cong$

③  $\angle 5 \cong \angle 8$ ;  $\angle 6 \cong \angle 7$

③ Vert  $\angle$ s are  $\cong$

④  $\angle 1 \cong \angle 8$ ;  $\angle 2 \cong \angle 7$

④ Transitive